

CLAIMS

What is claimed is:

1. A method for calibration process management of a calibration testing unit and a plurality of units under test, comprising:
 - 5 configuring a user interface in communication with a calibration process management software system;
 - configuring a communications link in communication with the software system, the software system capable of communicating with the calibration testing unit and the plurality of units under test; and
 - 10 wherein the software system manages the user interface and the communications link in a manner permitting an operator to calibrate the plurality of units under test.
2. The method of claim 1, further comprising tracking of the calibrated units under test using a permanent unique identifier and a dynamic unique identifier.
3. The method of claim 2, wherein each permanent unique identifier is assigned when an object
15 is created, and each dynamic unique identifier is assigned any time the object is modified.
4. A method for calibration process management of a calibration testing unit and a unit under test, comprising:
 - configuring a user interface in communication with a calibration process management software system;
 - 20 configuring a communications link in communication with the software system, the software system capable of communicating with the calibration testing unit and the unit under test;
 - assigning a permanent unique identifier when an object is created, and a dynamic unique identifier any time the object is modified;
 - 25 wherein the software system manages the user interface and the communications link in a manner permitting an operator to calibrate the unit under test.
5. The method of claim 4, further comprising tracking of the calibrated unit under test using the permanent unique identifier and the dynamic unique identifier.
6. A system for calibration process management of one or more than one unit under test (UUT),
30 each UUT being an instance of a UUT equipment type, comprising:
 - a first computer readable medium for storing one or more first data objects representing calibration data from the one or more than one UUT;
 - a second computer readable medium for storing a first globally unique identifier in an association relationship to one of the one or more first data objects;

- a third computer readable medium for storing one or more second data objects representing a reference standard for the UUT equipment class;
- a fourth computer readable medium for storing a second globally unique identifier in an association relationship to one of the one or more second data objects;
- 5 a calibration management control program embodied on a fifth computer-readable medium for calibration of the one or more than one UUT, the calibration management control program in communication with the first data objects, second data objects, first globally unique identifier and second globally unique identifier, and
- an application program interface embodied on a sixth computer-readable medium for
- 10 execution on a computer in conjunction with the calibration management control program.
7. The system of claim 6 wherein the calibration management control program permits contemporaneous calibration of more than one UUT, and the application program interface is configured for contemporaneous calibration of more than one UUT, each UUT being an instance of the same UUT equipment type.
- 15 8. The system of claim 6, wherein the application program interface is configured to receive identification of the UUT equipment type, and a value as found for a specific calibration function, and display tolerance limits for the UUT based upon the UUT equipment type.
9. A method for calibrating a UUT for a specific calibration function, comprising the steps of:
- receiving a first identification attribute associated with a UUT;
- 20 receiving a second identification attribute associated with a reference measuring unit;
- receiving a specific calibration function to be tested;
- maintaining in a first memory a reference database of one or more than one second identification attribute in holding relationship to one or more than one reference identification address, each reference identification address being associated with a single
- 25 calibration function;
- looking up in the reference database, the reference identification address being held by the second identification attribute, and associated with the specific calibration function;
- selecting a unique record identification address;
- receiving a value as found for the specific calibration function for the UUT;
- 30 storing in a second memory the value as found in a being-held relationship to the record identification address; and
- storing in a third memory the record identification address in a being-held relationship to the reference identification address.
10. The method of claim 9, wherein either the first identification attribute or the second

identification attribute, or both the first identification attribute and the second identification attribute, is a asset number.

11. The method of claim 9, further comprising the steps of receiving a value as left for the specific calibration function for the UUT and storing in the second memory the value as left in a being-held relationship to the record identification address.
12. The method of claim 9, further comprising the step of returning a test accuracy ratio.
13. The method of claim 9, further comprising the step of returning an estimated measurement uncertainty.
14. The method of claim 9, further comprising the step of automatically converting the units of the received value as found.
15. The method of claim 9, further comprising the steps of:
 - maintaining in a fourth memory an equipment database correlating for individual make and model of equipment, a nominal value to calibration function;
 - receiving make and model of equipment attributes for the UUT;
 - looking up in the equipment database, the nominal value for the specific calibration function for the received make and model of equipment;
 - returning the nominal value; and
 - calculating a calibration tolerance and returning the limits.
16. The method of claim 15, further comprising the steps of receiving a value as left for the specific calibration function for the UUT and storing in a fifth memory the value as left in a being-held relationship to the record identification address.
17. The method of claim 16, further comprising the step of indicating whether the value as found or the value as left is within the limits of the calibration tolerance.